

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-73. (Cancelled)

74. (Currently Amended) A method for predictively responding to a network management data request, the method comprising:

receiving a first network management data request;

determining if the said first network management data request matches a pattern of request defined and stored in advance in a memory, the pattern including one or more expected management data requests;

determining if data responsive to the said first network management data request is contained in a cache of prefetched network management data if the said first network management data request matches a pattern defined in the said memory;

sending a response including the said data responsive to the said first network management data request, if the said data responsive to the said first network management data request is contained in the said cache and if the said first network management data request matches a pattern defined in the said memory; and

collecting, if the said first network management data request matches a pattern defined in the said memory, data responsive to any remaining network management data requests in the matched pattern.

75. (Currently Amended) The method of claim 74, further comprising:

transmitting the said first network management data request to a network management data core to respond to said first network management data request if said first network management data request does not match a pattern defined in said memory.

76. (Cancelled)

77. (Currently Amended) The method of claim 74, wherein the said pattern further comprises a periodicity of the network management data requests contained in the said pattern.

78. (Currently Amended) The method of claim 106, wherein the said initiating includes initiating periodic data collections at a rate matching a periodicity of the network management data requests contained in the said pattern.

79. (Currently Amended) The method of claim 74, wherein the said network management data request is a Simple Network Management Protocol (SNMP) request.

80. (Currently Amended) The method of claim 74, wherein the said determining if a first network management request matches a pattern of request based on at least one of:
a community string;
a network management system IP address; or
a network management system port number.

81. (Cancelled)

82. (Currently Amended) An apparatus for predictively responding to a network management data request, the apparatus comprising:

a storage memory adapted to define and store in advance at least one pattern of request, the

pattern of request including one or more expected network management data requests;

a cache memory adapted to store prefetched network management data;

a request classifier configured to determine if a first network management data request

matches a pattern defined in the said storage memory and further configured to

determine if data responsive to the said first network management data request is

contained in the said cache memory if the said first network management data request

matches a pattern defined in the said memory;

a sender coupled to the said request classifier configured to send a response including the

said data responsive to the said first network management data request, if the said data

responsive to the said first network management data request is contained in the said

cache memory and if the said network management data request matches a pattern

defined in the said storage memory; and

a lookahead processor coupled to the said request classifier configured to collect, if the said

first network management data request matches a pattern defined in the said storage

memory, data responsive to any remaining network management data requests in the

matched pattern.

83. (Currently Amended) The apparatus of claim 82, further comprising:

an interface coupled to the said request classifier configured to transmit the said first

network management data request to a network management data core to respond to the

~~said~~ first network management data request if the ~~said~~ first network management data request does not match a pattern defined in the ~~said~~ storage memory.

84. (Cancelled)

85. (Currently Amended) The apparatus of claim 82, wherein the ~~said~~ pattern further comprises a periodicity of the network management data requests contained in the ~~said~~ pattern.

86. (Currently Amended) The apparatus of claim 107 ~~106~~, wherein the ~~said~~ lookahead processor is further configured to initiate periodic data collections at a rate matching a periodicity of the network management data requests contained in the ~~said~~ pattern.

87. (Currently Amended) The apparatus of claim 82, wherein the ~~said~~ network management data request is a Simple Network Management Protocol (SNMP) request.

88. (Currently Amended) The apparatus of claim 82, wherein the ~~said~~ request classifier uses, in determining if a first network management data request matches a pattern, at least one of:
a community string;
a network management system IP address; or
a network management system port number.

89. (Cancelled)

90. (Currently Amended) An apparatus for predictively responding to network management data requests, the apparatus comprising:
- a storage memory adapted to define and store in advance a pattern of request, the pattern including one or more expected network management data requests;
 - a cache memory adapted to store prefetched network management data;
 - means for determining if a first network management data request contains a pattern defined in the said storage a memory;
 - means for determining if data responsive to the said first network management data request is contained in the said cache memory if the said first network management data request contains a pattern defined in the said storage memory;
 - means for sending a response including data responsive to the said first network management data request if the said data responsive to the said first network management data request is contained in the said cache memory and if the said first network management data request matches a pattern defined in the said storage memory; and
 - means for collecting, if the said first network management data request matches a pattern defined in the said storage memory, data responsive to any remaining network management data requests in the matched pattern.
91. (Currently Amended) The apparatus of claim 90, further comprising:
- means for transmitting the said first network management data request to a network management data core to respond to the said first network management data request if the said first network management data request does not match a pattern defined in the said storage memory.

92. (Cancelled)

93. (Currently Amended) The apparatus of claim 90, wherein the said pattern further comprises a periodicity of network management data requests contained in the said pattern.

94. (Currently Amended) The apparatus of claim 108, wherein the said means for initiating includes means for initiating periodic data collections at a rate matching the said periodicity of network management data requests contained in the said pattern.

95. (Currently Amended) The apparatus of claim 90, wherein the said network management data request is a Simple Network Management Protocol (SNMP) request.

96. (Currently Amended) The apparatus of claim 90, wherein the said means for determining if a first network management data request matches a pattern uses at least one of:
a community string;
a network management system IP address; or
a network management system port number.

97. (Cancelled)

98. (Currently Amended) A program storage device, readable by a machine, embodying a program of instructions executable by the machine to perform a method for predictively responding to a network management data request, the method comprising:

receiving a first network management data request;

determining if the said first network management data request matches a pattern of request defined and stored in advance in a memory, the pattern including one or more expected management data requests;

determining if data responsive to the said first network management data request is contained in a cache of prefetched network management data if the said first network management data request matches a pattern defined in the said memory;

sending a response including the said data responsive to the said first network management data request, if the said data responsive to the said first network management data request is contained in the said cache and if the said first network management data request matches a pattern defined in the said memory; and

collecting, if the said first network management data request matches a pattern defined in the said memory, data responsive to any remaining network management data requests in the matched pattern.

99. (Currently Amended) The program storage device of claim 98, wherein the method further comprises:

transmitting the said first network management data request to a network management data core to respond to the said first network management data request if the said first network management data request does not match a pattern defined in the said memory.

100.(Cancelled)

- 101.(Currently Amended) The program storage device of claim 98, wherein the said pattern further comprises a periodicity of the network management data requests contained in the said pattern.
- 102.(Currently Amended) The program storage device of claim 109, wherein the said initiating includes initiating periodic data collections at a rate matching a periodicity of the network management data requests contained in the said pattern.
- 103.(Currently Amended) The program storage device of claim 98, wherein the said network management data request is a Simple Network Management Protocol (SNMP) request.
- 104.(Currently amended) The program storage device of claim 98, wherein the said determining if a first network management request matches a pattern of request based on at least one of:
a community string;
a network management system IP address; or
a network management system port number.
- 105.(Cancelled)
- 106.(Currently Amended) The method of claim 74, further comprising:
if the said first network management data request matches a pattern defined in the said memory, but data responsive to the said first network management data request is not contained in the said cache, initiating periodic data collections for data responsive to network management data requests in the said pattern.

107.(Currently Amended) The apparatus of claim 82, wherein the said lookahead processor is further configured to initiate periodic data collections for data responsive to the network management data requests in the said pattern, if the said first network management data request matches a pattern defined in the said memory, but data responsive to the said first network management data request is not contained in the said cache.

108.(Currently Amended) The apparatus of claim 90, further comprising:
means for initiating periodic data collections for data responsive to network management data requests in the said pattern, if the said first network management data request matches a pattern defined in the said storage memory, but data responsive to the said first network management data request is not contained in the said cache memory.

109.(Currently Amended) The program storage device of claim 98, wherein the said method further comprises:
if the said first network management data request matches a pattern defined in the said memory, but data responsive to the said first network management data request is not contained in the said cache, initiating periodic data collections for data responsive to network management data requests in the said pattern.

110.(New) The method of claim 74 wherein the determining if a first network management request matches a pattern of request is based at least in part on a community string.

- 111.(New) The apparatus of claim 82 wherein the request classifier uses a community string in determining if a first network management data request matches a pattern.
- 112.(New) The apparatus of claim 90 wherein the means for determining if a first network management request matches a pattern of request further comprises means for determining if a first network management request matches a pattern of request based at least in part on a community string.
- 113.(New) The program storage device of claim 98 wherein the determining if a first network management request matches a pattern of request is based at least in part on a community string.